# THE INNOVATOR



The all-new Mercury V-6 FourStroke



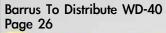
Barrus wins Royal Navy Contract



John Deere Powered Compact Crusher



Barrus expands its presence in the garden sector with the acquisition of the gardening gloves and footwear company, Town & Country. Full story page 4.



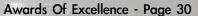




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Town & Country Supports

New Barrus Transport Fleet - Page 31





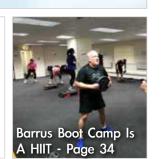
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### TOWN & COUNTRY GOES FROM STRENGTH TO STRENGTH WITH BARRUS

August 2017 saw the expansion of Barrus's presence in the garden sector with the acquisition of the gardening gloves and footwear company, Town & Country.

The brand joined Barrus's extensive line-up of leading garden machinery and tool brands including Cub Cadet, Lawnflite, Agri-Fab, WOLF-Garten, Wilkinson Sword and Energizer.

Founded and run by Barry Page and with a heritage that spans more than half a century, Town & Country offers one of the most comprehensive collections of gardening gloves and footwear. Continued investment and a focus on innovation have brought together a range that combines quality, functionality and style with exceptional value for money.

"The acquisition of Town & Country reinforces our commitment to the garden sector," commented Robert Muir, Managing Director, E. P. Barrus Ltd. "This well-established household name has great synergy with our line-up of premium gardening brands and provides the potential for future growth through existing and new distribution channels."

Town & Country has been at the forefront of developments in the gardening gloves and footwear markets and has been responsible for perfecting the design of the Master Gardener glove, the UK's best-selling gardening glove.

"We are meeting the needs of gardeners by bringing premium brands together to offer a portfolio of high quality, innovative products," commented Tim Hart, Director of Sales & Marketing, E. P. Barrus Ltd. "Town & Country, like all our brands, is fully supported by our operational expertise which enables us to offer excellent distribution service levels, and we will continue to build and develop the brand into the future."



### New 'Captivating Colours'

The latest product development is the Captivating Colours range, which has been designed to inject a dash of colour into a selection of the ranges. With the addition of purple, teal and pink, the collection will brighten up even the dullest of days in the garden.

One of the collections to have received the 'Captivating Colours' treatment is the Bamboo glove. This is the stylish choice for the environmentally conscious gardener. Also part of the 'Captivating Colours' collection is the Ultimax Glove, a multi-feature glove designed to offer an extremely close fit, unequalled dexterity and exceptional durability.

Other new products include the Bosworth and Bradgate striped boots in a selection of attractive colours, the popular, eye-catching patterned Cloggies and new secateurs and secateurs holders, all of which expand the range considerably. A number of these new products, including the Bosworth Boots and Cloggies, have been recognised as best buy items.



Cub Cadet is renowned for being at the forefront of innovation which is reinforced by the launch of a new model within its Enduro<sup>™</sup> Series.

The XT2 PR106ie is part of the XT2 range and is the very first to feature an EFI (electric fuel injection) engine. The EFI engine is easier to start, even when cold, which is particularly useful after being stored for long periods. The machine will use up to 25% less fuel when compared to standard carburettor engines. This means that the machine is cheaper to run and better for the environment. With no carburettor, fewer oil changes are needed resulting in even more cost savings.

The XT2 PR106ie is ideal for working around busy gardens and obstacles thanks to a range of specially designed features providing high levels of

### CUB CADET STAY ONE STEP AHEAD

power, control functions and durability. The EFI engine has 5-10% hig power and torque than carburettor engines, and is much more reliable, being less susceptible to icing.

As with every model across the XT range, the XT2 PR106IE has a market leading cut, collect and mulch system, and an extremely stable and smooth V-Belt system with a smooth hydrostatic drive system. It also features Tight Turn xTreme, the innovative technology delivering the tightest turning circle on the market at 17cm. "Phil Noble, Field Sales and Technical Manager for the Garden Division at Barrus commented, "Cub Cadet is at the forefront of garden machinery innovation, and we pride ourselves on always being one step ahead."

### MORE POWER, LESS FUEL

The new Cub Cadet fuel-injected engine boasts serious strength, delivering the kind of high-performance power you would expect from Cub Cadet.

Electronic Fuel Injection (EFI) is a high-pressure fuel management system. Just like modern cars, EFI uses an on-board computer, injector nozzle, and multiple sensors to reliably deliver exactly the right amount of fuel to get the most performance and efficiency out of the engine. Cub Cadet EFI is an advanced electronically controlled 'Closed Loop' system that uses real-time feedback to sense the usage conditions and instantly optimise combustion to give smooth running, and exceptional starting every time.

EFI uses up to 25% less fuel, which means fewer emissions and fewer fill-ups. Less time needs to be spent on maintenance as it has no carburettor and requires fewer oil changes.



process to ensure they have been built to uphold exacting standards of strength, high performance and premium quality. Going to extremes, Cub Cadet engines are tested in the most challenging environments to ensure dependable all-temperature starting.

To become Cub Cadet certified, engines are evaluated using a rigorous



Barrus is returning to the utility vehicle market as the UK distributors for the American brand of Hisun all-terrain UTVs and ATVs.

Hisun Motors Corporation, based in Texas, USA, has been supplying all-terrain vehicles to some of the best-known names in the industry and through this private label production has grown into one of the largest global providers of UTVs and ATVs.

"Our co-owner, MTD, has been distributing a range of Hisun, purpose-built utility vehicles in the USA under the Cub Cadet brand since 2015," commented Tim Hart, Director for Sales & Marketing at Barrus. "When we were looking to re-enter the utility vehicle sector, we decided to strategically align ourselves with MTD based on their experience and successful



From left to right: Roger Suckling, Sales Manager, Vehicle Division, Barrus and David Blake, Head of ATV Sales at Cornish Tractors.

introduction of the Cub Cadet Challenger Series in the US."

Barrus will be offering a range of fully road legal Hisun petrol UTVs from 450cc to 1000cc, ATVs from 400cc to 750cc, and an impressive electric powered UTV. "This is a unique and versatile line-up of high-performing machines that feature some of the best equipment packages in the industry," commented Roger Suckling, Sales Manager for the newly formed Vehicle Division at Barrus.

Distribution of Hisun will be built through a carefully selected network of dealers. "We are looking to recruit a mix of specialist ATV, ATV/Lawn & Garden and ATV/Agricultural dealers," Roger continued. "Establishing a strong dealer network with the knowledge and expertise to drive the brand forward combined with excellent customer service focus is key," Roger concluded.

One of the first dealers to be signed up is Cornish Tractors located on the border of Cornwall & Devon. Specialising in the sale and servicing of both new and pre-owned agricultural tractors, machinery, plant and vehicles, the company is looking forward to adding the Hisun brand to its portfolio.

"We are delighted to be part of this exciting launch of a new range of off-road vehicles in the UK," commented David Blake, Head of ATV Sales at Cornish Tractors. "Hisun is well-known globally, and with the support and operational expertise of Barrus there is great potential for this brand."

Barrus is planning to put Hisun ATVs to the test at the 36th annual Weston Beach Race in October, the biggest event in the UK's off-road calendar and one of the toughest sand tracks anywhere in the world.

### CUB CADET PRO Z SERIES GETS THE THUMBS UP FROM COMMERCIAL USERS

Cub Cadet's commitment to the professional market sees the launch of the newly designed Pro Z Series of commercial, zero-turn mowers.

The Pro Z Series line up consists of the PRO Z1, PRO Z5 and the PRO Z7, with each machine being designed to meet the specific needs of professional landscape contractors.

These machines are the strongest, most efficient mowers to have ever been created by Cub Cadet, and have been given the seal of approval by 100 landscapers who put them through their paces for a rigorous testing period of 16 weeks. All the machines have been developed with extreme strength at their core. The PRO Z5 and PRO Z7 have been designed and built with the industry's only Triple 7-gauge steel, plus a 1/4-inch leading edge and 6/16-inch side reinforcements. From frame to front yoke, the Pro Z Series is designed to absorb the impact of rough terrain and stand up to the demands of everyday professional use.

In addition to this, the full-length laser-cut steel frame and 5/16-inch stee rear bumpers are protected with a durable e-coating. This precise, multi-stage process provides automotive-grade corrosion defence and goes beyond the industry standard. High-back suspension seats with lumber support and padded armrests come as standard, enabling operators to work fatigue free, for longer and in greater comfort than ever before.

The market-leading steering system - Synchro Steer – delivers the ultimate manoeuvrability and control, with smooth, precise handling and increased stability on slopes.

The new machines were showcased by Barrus at the end of last year on the Cub Cadet stand at Saltex, the UK's national event for grounds care, sports, amenities, estates and green space management.

Phil Noble, Field Sales and Technical Manager for the Garden Division at Barrus commented, "The PRO Z Series is loaded with features that have been painstakingly designed for exceptional performance, unmatched comfort and perfect results. We are dedicated to working with the professional sector and believe that we have created products that will prove to be not only popular, but indispensable to the market."



### MERCURY MARINE INTRODUCES NEW V-6 EXPANSION TO ITS SEAPRO FAMILY AT THE

The new engine family, which builds on the success of Mercury's 75-150hp FourStroke outboards, features 175hp, 200hp and 225hp FourStroke outboards and a V-6 200hp SeaPro commercial outboard.

#### V-6 lineup of Mercury FourStrokes (175-225hp)

The 3.4L V-6 employs a large displacement, naturally aspirated powerhead and proven mid-section and drive system designs. Offering the option of mechanical or digital controls, hydraulic or power steering and black or white cowls, the versatility of the new V-6 engine is ideal for repower applications. Mercury's 3.4L, 200hp FourStroke is the company's largest displacement in 200hp class, and at 215kg, the engine is also the lightest in its class. With its performance-inspired dual overhead cam (quad cam) and four-valve design, the engine will reach higher speeds, faster and boasts Mercury's best acceleration and 20% more torque than the closest four-cylinder competitor at cruise.

#### Superior Fuel Economy

Providing unmatched fuel efficiency, the 3.4L V-6 FourStroke takes advantage of Mercury's proprietary "Advanced Range Optimisation" (ARO) calibration to generate a fuel saving of up to 15% compared to the closest four-cylinder competitor.

#### **Additional Colour Options**

In addition to Mercury's legendary black engines, this new lineup offers three shades of white available for the 200hp and 225hp outboards. For the first time, Mercury will also offer four accent panel colours plus ready-for-print panels, which allow for personalisation.

#### Noise, Vibration and Harshness (NVH)

The new 3.4L V-6 boasts excellent NVH quality and represents advancement from current products such as a naturally balanced design and cowl features that prevent noise from reaching the operator.

WHALER

# FOURSTROKE OUTBOARD LINE-UP AND AN 2018 MIAMI INTERNATIONAL BOAT SHOW



Other innovations that differentiate the 3.4L V-6 are:

- A top cowl service door which makes routine maintenance easier than ever before.
- Idle charge battery management capability that protects against
  consumers draining batteries while operating multiple electronic devices.
- Adaptive Speed Control which maintains rpm regardless of load or condition changes and provides a 'sportier' feel for drivers.



#### Mercury 200hp V-6 SeaPro

The Mercury SeaPro 200hp 3.4L V-6 FourStroke outboard sports the company's largest displacement and lightest engine in its class, approximately 11kg lighter than the engine that it is replacing. Like all Mercury SeaPro outboard engines, the 3.4L V-6 FourStroke is built for durability and reliability and is calibrated for commercial usage.

Developed by Mercury engineers to optimise cruise fuel economy, the 200hp V-6 SeaPro outboard also features ARO calibration giving confidence to stay out on the water longer. The ECU adjusts fueling automatically and seamlessly so that the operator won't feel or hear it.

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"The new 3.4L V-6 FourStroke engine range and SeaPro expansion has been a much anticipated addition and completes the Mercury outboard portfolio. This new family will allow us to target the commercial market more so than ever before and we are looking forward to its introduction into the market over the coming months" commented Ben Allen, General Manager for the Marine Leisure Division at Barrus.

Mercury Marine has been awarded a 2018 Innovation Award by the National Marine Manufacturers Association in the Outboard Engine category for its all-new V-6 FourStroke outboard family.



### THE NEW QUICKSILVER 675 PILOTHOUSE EXPLORER FOR SERIOUS FISHING AND COMFORTABLE CRUISING

Barrus launched the Quicksilver 675 Pilothouse Explorer at the London Boat in January. This next-generation version combines performance and intelligently designed cruising features for an unbeatable fishing experience.

#### Perfect for a great day out

The new 675 Pilothouse features a cleverly designed cockpit for comfort, combined with class-leading space that is perfect for both fishing and leisure. Power can be provided by Mercury or Mariner outboards up to 200hp.

#### Safety

The 675 Pilothouse is a ready-for-fun craft designed with safety in mind. High freeboards in the cockpit, safety rails, and easy bow access ensure a worry-free water experience with plenty of additional safety options. The helm provides 360° visibility; swim platforms allow safe and easy access to the water and an optional windlass ensures extra control.

#### Comfort

The fully configurable cockpit space can be converted quickly to a seating and dining area with an optional comfort pack. In the cabin, there is seating for four and a convertible berth that sleeps two. A wide starboard walk around allows easy bow access, and a sliding door provides shelter and quick accessibility to the rest of the boat. The handy galley with sink

and cooker can be easily upgraded to include freshwater capabilities and a refrigerator. The craft can also be enhanced with a dual helm station, sea toilet and coloured hull.

#### Fishing

Ready for a great fishing experience, the 675 Pilothouse has a dedicated station for bait preparation complete with an integrated cutting board. The optional GPS/fish finder can be used to locate the best fishing location and once there, the easily-accessible rod holder allows for more fishing time from either the large cockpit or forward fishing platform.

#### Storage

The 675 Pilothouse combines a sense of space and freedom without sacrificing storage. Fishing rods fit perfectly in a lockable floor storage area, and a fully-lined storage area below the galley. Additional space under the berth and aft bench seat provides a variety of safe, accessible locations to keep everything needed for fishing and fun.

Ben Allen, General Manager for the Marine Leisure Division at Barrus, Quicksilver's UK distributor commented, "This special edition has been developed for fishermen looking for a unique craft with unmistakable sporty styling. Complete with first-class equipment as standard, the 675 Pilothouse Explorer is extremely flexible making it the ideal craft for both serious fishing and cruises with friends and family."

#### QUICKSILVER ACTIV 605 OPEN WINS BOAT OF THE YEAR AWARD 2017

Many exceptional new boats varying in style and size ran for the Boat of the Year award, which makes the success of the Activ 605 Open all the more impressive.

The boat of the year awards is organised by Moteur Boat Magazine, France's leading nautical magazine. A total of 15 out of 50 new motor boats

made it to the finals with the finalists taking part in extensive testing over two days by both boating enthusiasts and marine experts.

The Activ 605 Open won the overall boat of the year award for its value, ease of use, safety onboard, and versatility making it ideal for leisurely days out with family and friends, and fishing trips.







### **RIBEYE TEAM UP WITH MERCURY**

Mercury Racing Verado engines pair with Joystick Pilot Outboard controls to deliver the ultimate Ribeye PRIME NINE41 experience.

Underpinned by cutting edge design and British craftsmanship, Ribeye has changed the way that leisure users approach the sea since 1998.

Ribeye's luxury PRIME series is regarded as the ultimate range of leisure craft and combines advanced technologies with innovative styling to deliver class leading attention to detail and stunning performance.

The latest addition to the range, PRIME NINE41, is more opulent, more comfortable and more technologically sophisticated than any other RIB. Powered by twin Mercury Racing Verado 400R outboard engines and controlled by Mercury's Joystick Piloting Outboard (JPO) system, this flagship model is the ultimate expression of performance and luxury.

"We are very proud of our PRIME range – the NINE41 has proven particularly successful as it encompasses the features of a hard boat coupled with the performance and safety of an offshore RIB finished with beautiful aesthetics," commented Ella Chivers, Marketing Director, Ribeye. "It truly is one of the best leisure RIBs in the world," Ella concluded.

Developed by Mercury Marine, JPO allows any pilot to be a seasoned pro with 360° control at their fingertips. The system locks the boat's position using a GPS satellite antenna then works with the engines and drives to maintain the position and heading of the boat regardless of wind or current.

"This iconic RIB is perfectly paired with the unrivalled power of Mercury Verado engines and effortless precision control of the JPO system to give PRIME NINE41 pilots total confidence and the ultimate boating experience," commented Ben Allen, General Manager for the Marine Leisure Division.

### MERCURY MARINE CONTINUES TO UPGRADE ITS WORLD-CLASS VESSELVIEW PLATFORM

Mercury Marine continues to enhance the boating experience through its family of VesselView displays.

In November 2017, Mercury introduced VesselView903, the company's largest and most advanced multifunction display. Earlier this year VesselView403 was launched replacing the VesselView4 providing additional functionality for the consumer.

Since the launch of SystemView in 2003, Mercury has continued to set the standards for digital controls, providing boaters custom Mercury hardware and functionality to maximise the boating experience. "Mercury continues to innovate and listen to what customers want," commented Ben Allen, General Manager for the Marine Leisure Division at Barrus. "We live in a digital world and providing our customers with the most intuitive controls that are easy to use is important to improve the overall boating experience," Ben concluded.

The new VesselView403 not only provides the digital interface customers have come to expect from Mercury, but it also integrates an Active Trim interface so that the Active Trim dash pad is not required. VV403 incorporates WiFi support through a USB token that is included with the unit. The new VesselView403 display is compatible with all of Mercury's various SmartCraft capable engines and can display up to two engine's data simultaneously.

The Mercury VesselViewsuite of multi-function displays now includes the 903, 703, 502 and 403.



# WILKINSON SWORD SCISSORS A CUT ABOVE THE REST

Wilkinson Sword has created a new collection of scissors developed for modern needs to provide excellent cutting solutions around the home and garden.

The collection consists of eight scissors across four ranges – Everyday, Classic, PRO-Blade<sup>®</sup>, and X-Blade<sup>®</sup>.

The Everyday scissors have 23cm (9") stainless steel blades, with an All-Purpose straight blade ideal for general cutting tasks around the house, and the 22cm (8.5") serrated Kitchen blade is perfect for kitchen use. To add to the versatility of the scissors, they are comfortable for both left and right handed users with soft feel grips.

The Classic scissors both benefit from 23cm (9"), high quality stainless steel blades and traditional handle. Again, the All-Purpose have straight blades for smooth and precise cutting, whilst the Kitchen version has serrated blades, which mean that they don't slip when tackling items such as chicken wings or fish fins.

The PRO-Blade® range has superior stainless steel blades for enhanced sharpness and lasting cutting performance. The precision ground cutting edge on the 23cm (9") blade of the All-Purpose version provides the ultimate sharpness, and the well-balanced design ensures a natural cutting action, making them easy to use. The Kitchen scissors have razor sharp, 20cm (8") blades, and the inclusion of a notch makes short work of bones and tough stems.

The X-Blade® range benefit from premium quality, high carbon steel blades with a non-stick coating, providing excellent edge holding and blade toughness. They resist the build-up of sticky residue making them easy to wipe clean and maintain. The 23cm (9") blades on the All-Purpose scissors

can tackle a whole host of tasks around the house and garden, whilst the 20cm (8") precision serrated blades on the Kitchen Scissors are perfect for everything from intricate culinary preparations to bone cutting. These are the ultimate in household and kitchen scissors, with a well-balanced design and soft grip contoured handles.

The new collection of scissors from Wilkinson Sword really does provide something for everyone and for all tasks. All scissors carry the reassuring Wilkinson Sword 10-year guarantee.



### BE PART OF THE ELITE WITH WILKINSON SWORD

The Elite Cutting Collection from Wilkinson Sword is a refined selection of premium garden tools providing cutting-edge performance, precision, and comfort.

Individually crafted with superior Japanese SK3 and SK5 steel blades, strong dual cast housing with integrated shock absorption system and lightweight extruded aluminium handles with plush contoured handles, these tools have been created for the gardener who is passionate about quality, durability, and design.

Within this beautifully designed collection are eight tools to cover every cutting need you have in the garden, all benefiting from the use of top quality materials and craftsmanship.

The Elite Bypass Loppers and the Elite Hedge Shears feature non-stick Japanese SK5 blades, luxurious soft grips, and both models are available as telescopic options.

Completing the collection are four pruners. Each of these pruners has a cutting capacity of 22mm, with non-stick Japanese SK3 Steel Blades and precision ground leading edges. With the option of Bypass and Anvil models, there is a pruner to suit a range of tasks for trimming young, new growth and hard, dead wood.





### **CELEBRATING 35 YEARS OF WOLF-GARTEN MULTI-CHANGE®**

WOLF-Garten is marking 35 years of multi-change<sup>®</sup> by raising the bar even higher.

Using a patented 'click' connection the multi-change<sup>®</sup> system has more than 60 different tool heads and 15 handles of varying lengths, so it covers numerous gardening tasks. WOLF-Garten has been working on a number of changes to mark the occasion including enhancements to the product design, new user-friendly packaging, an extended guarantee and new season products.

WOLF-Garten has updated the design of the tool head attachment, which provides better grip and an optimised spring connection. This updated version fits with the current system, so all new tool heads will continue to be compatible with all handles.

To make product selection easier at the point-of-sale, the packaging incorporates a 'try me' option showing just how easy it is to attach the tool head to the handle. The new livery also includes task orientated colourcoding, meaning it is simple to choose the right tool for the job. The rebrand continues and extends to WOLF-Garten's iconic red and yellow logo, which has also had a refresh whilst retaining the distinctive Wolf head consumers are so familiar with.

The product guarantee has been increased to an industry-leading 35 years, testament to the quality of workmanship and reinforcing the confidence of the multi-change<sup>®</sup> product.

New product introductions include the 4-in-1 Leaf Rake which has three working widths to remove leaves and green waste from small and large areas, and the Gutter Cleaner with an integrated leaf scoop and gutter brush.

35 years on, the multi-change® system remains the most innovative modular system for gardening tools.



### HELP FOR HEROES 'FORCE FOR GOOD' GARDEN AT CHELSEA



WOLF-Garten is continuing their support of the Help for Heroes Recovery Centre at Tedworth House as part of a project for a themed garden at this year's RHS Chelsea Flower Show.

Help for Heroes offers courses for wounded, injured and sick veterans and service personnel to learn more about Horticulture, and many of those that are supported by the charity at Tedworth House have gone on to achieve their City and Guilds qualifications and continue their studies at Sparsholt College near Winchester. "As a result of our close relationship with Sparsholt College, they asked if they could theme their garden at RHS Chelsea Flower Show on the recovery journey of one of our beneficiaries," commented Kirtsy Williams, Communications Officer South for Help for Heroes. "The veterans and the Level 3 Horticulture students have been working closely together from the initial stages, and the garden will be called 'The Force for Good' which is a Help for Heroes campaign to empower injured veterans to regain their purpose and to make a positive impact in their communities."

The weekly Gardening Club at Tedworth House focuses on growing vegetables, and this will form part of the display in the garden along with

a shed full of the WOLF-Garten tools that are used most readily by the beneficiaries. "This is a really exciting opportunity for those we support who have developed a real interest in gardening and find it hugely beneficial in their recovery," commented Lucy Thorpe,

Horticultural Therapist at Help for Heroes. "It is giving them a fantastic insight and experience in creating an exhibit at the world's most prestigious Flower Show.





### ENGINES POWERING NEW, INNOVATIVE WORKBOATS FOR ROYAL NAVY PROUDLY BUILT IN BICESTER BY BARRUS

Barrus has been awarded the engine supply contract by Atlas Elektronik UK (AEUK) who will build the £48 million next-generation Royal Navy workboats including those supporting Britain's flagship carrier, HMS Queen Elizabeth.

Appointed by the MoD as the Prime Contractor and Integrator for the project, Atlas Elektronik UK will supply up to 38 workboats and an extended programme of In-Service Support from 2018 until 2024. Barrus's relationship with AEUK extends almost ten years working as consultants and suppliers of marine engines for projects including unmanned and autonomous craft applications.

Ranging in size from 11 to 18 metres, the multi-role 'SEA Class' range of vessels will all be fitted with Yanmar marine diesel engines from 350hp to 1000hp, prepared in Barrus's custom-engine build facilities to AEUK agreed specifications. In addition, Barrus will provide AEUK with specialist engineering support including a comprehensive training programme, service support and technical expertise over a six-year period. The contract will help to secure future engineering roles and apprenticeships within the company.

Developed in response to a demand for safe, reliable and flexible boats that can be rapidly reconfigured for a number of different naval operational roles, the 'SEA Class' range will perform tasks including diver training, explosive ordnance disposal, officer training, passenger transport, Antarctic exploration, hydrographic survey and logistic re-supply. "We are very proud to have been selected by Atlas Elektronik UK to provide the propulsion systems and engineering support for these cutting-edge workboats," commented David Etherington-Smith, Sales Manager for the Special Products Division at Barrus. "This builds on our success with the supply of earlier versions of these Yanmar engines and ensures continuity and commonality with current in-service engines within the MoD fleet."

The first Yanmar engines to be supplied as part of the contract were loaded and transported by Barrus on the 18th September last year, the company's 100-year anniversary date. The two 911hp Yanmar engines, weighing in at 5 tonnes were safely transported to Safehaven Marine in Ireland who is building the 18-metre Wildcat 60 catamaran, the largest vessel in the new fleet of workboats.



### BARRUS LAUNCH NEXT-GENERATION ENGINES FOR COMMERCIAL USERS

For years, the Special Products division has worked closely with UK professional rescue organisations as both suppliers and consultants to ensure the teams are reliably equipped to face the most challenging conditions.

This was first demonstrated in the late 1970s when Barrus began working on the development of the Post Immersion Restart System (PIRS®), a system dedicated to the RNLI and armed services. PIRS® drains water from the engine allowing it to rapidly restart after submersion as, when a boat is capsized, the outboard engine becomes flooded making it inoperable and the crew vulnerable. To remove water from the engine and enable it to restart, the engine and fuel system must be drained which is both time consuming and difficult, particularly with the boat moving in the water as components are easily dropped and lost.

The first generation of PIRS<sup>®</sup> utilised a drain system fitted in line with the carburettor bowls to drain the fuel without removing components. This system proved to be very effective and soon became essential for engines fitted to rescue crafts. However, as crew were required to remove the spark plugs, feedback suggested that a new method was required.

FAST PIRS®, an improved version of the system, was designed and produced in 2004 and included fuel drains, in addition to drain valves for transfer ports and cylinder heads which allowed the evacuation of water without removing any components. FAST PIRS® made it possible for an outboard that had been submerged to be restarted in forty seconds and the system was operated by a single lever on the outside of the engine without removing the engine cover. Initially exclusive to manual start engines, in 2009, Barrus further developed FAST PIRS® and created the fully waterproof, electric start FAST PIRS® which, with the addition of a starter motor, forced water out quicker and reduced restart time to less than 30 seconds.

The Special Products team have now developed two new versions of PIRS®, GEN 2 FAST PIRS®, a simplified, more durable and cost-effective FAST PIRS® system and Capsize PIRS®, a four-stroke adaptation.

#### GEN 2 FAST PIRS®

Similar to previous FAST PIRS® versions, GEN 2 FAST PIRS® drains the fuel system, but instead of using a single lever to control the system, all valves are operated independently to allow fine adjustment. This latest evolution has proved to be more reliable as the cylinder head valve design is more durable and cost-effective to produce and is fail-safe in operation.

#### Capsize PIRS<sup>®</sup> - Four-Stroke

With the combination of environmental concern, the durability of two-stroke engines and customer demand, Barrus launched the four-stroke PIRS® project in 2015 and have now developed a patented system for Mercury and Mariner four-stroke engines. Capsize PIRS® is fully automatic and integrated within the engine's electronic control unit. The system ensures no water can enter the internals of the engine and is operated without removing the engine cover as, unlike a two-stroke engine, this can contaminate the oil and can cause serious component failure.

The Gen 2 FAST PIRS<sup>®</sup> system is already being used by commercial and military customers, and orders are in the pipeline for the Capsize PIRS<sup>®</sup> engines to be supplied later this year.



breast cancer

### TOWN & COUNTRY LAUNCHES NEW BREAST CANCER NOW RANGE

Town & Country has joined forces with the UK's largest breast cancer charity, Breast Cancer Now, to bring gardeners a range of limited edition, stylish, pink gardening products.

There are three products in the new range; with 10-percent from the sale of each product being donated to Breast Cancer Now to help fund vital breast cancer research. With a contemporary design, they have all been designed with Breast Cancer Now's iconic pink colour scheme in mind, making the tools aesthetically pleasing and easy to spot in the garden.

The gloves are part of Town & Country's bamboo range, made of natural breathable fibres to offer a luxuriously soft feel. This unique material is naturally hypoallergenic and antibacterial and with a latex coating, these gloves offer additional protection against thorns. The bypass secateurs have a pink cushioned, soft grip handle, and built-in safety catch, and the chrome-plated carbon steel blades make the tool able to cut branches and stems up to 2cm thick. Also in the charity range is an elegant gardening pouch with a contemporary floral design in pink and white, which helps keep tools, gloves and gardening accessories close by.

"Our partnership with Breast Cancer Now is a great way to support the charity in raising funds for their incredible research," commented Tim Hart, Director of Sales & Marketing for Barrus. Gardening is a great way to clock up the required minutes of moderate exercise each week to help reduce the risk of developing breast cancer. The products look great and we are sure that gardeners will love them!"

Kate Kirby, Corporate Partnerships Officer at Breast Cancer Now commented, "We are delighted to be working with Barrus on the launch of their limited edition Town & Country gardening products. 10-percent of each product sold will go directly to the work of Breast Cancer Now. This will help us fund research to discover how to prevent breast cancer, how to detect it earlier and how to treat it effectively at every stage so we can stop the disease taking lives. We look forward to seeing the products in garden centres across the UK, and hope that gardeners enjoy using them."

#### WOLF-GARTEN TOOLS SUPPORT NATIONAL GARDEN SCHEME PHOTOGRAPHY COMPETITION

WOLF-Garten is partnering with the National Garden Scheme as the 2018 sponsor of their photography competition in association with BBC Gardeners' World Magazine.

The National Garden Scheme (NGS) is the most significant charitable funder of nursing charities in the country, donating over £50 million so far. The scheme enables garden owners to open their beautiful gardens to the public, sharing their passion and raising impressive amounts of money through entry fees, teas and cake.

Garden visitors are invited to submit a photograph they have taken in an NGS garden reflecting one of the six category themes which include Town Gardens; Design Details; Beautiful Garden Views; Garden Wildlife; People in Gardens and BBC Gardeners' World Magazine – Fantastic Flowers.

The judging panel, made up of representatives from the NGS, BBC Gardeners' World Magazine, WOLF-Garten and a guest judge, will select winners from each of the six categories who will then be put forward for the Best Overall Photograph. An appealing array of prizes is on offer from WOLF-Garten. Each of the six category prize winners will win £100 worth of WOLF-Garten garden tools of their choice with the winner of the 'Best Overall' photograph taking away the 72v Li-ion power battery garden tool collection of a grass trimmer, lawnmower, hedge trimmer and leaf blower.

"We are delighted to partner the National Garden Scheme in support of their competition to celebrate the glory of the garden," commented Ian Seager, Marketing Manager for WOLF-Garten. "The scheme not only offers inspiration to gardeners and non-gardeners alike but provides valuable charitable support to numerous organisations."



### CUTTING-EDGE OUTDOOR PRODUCTS FOR PROFESSIONALS

The CEuk range of high quality, outdoor professional products for the arboricultural and forestry industries is now being distributed by Barrus.

The Cutting-Edge saws brand of Trojan Handsaws and Stallion Telescopic Polesaws are leading the way in providing arborists, foresters, orchard growers and garden enthusiasts with high-performing pruning equipment. Ideal for high reach tree pruning, and available in three telescopic pole length options, the Stallion Polesaws feature high carbon tool steel blades with a serrated hard-chrome plated blade tip designed to leave a clean cut.

The deadly Root Assassin Shovel is ideal for cutting areas that are heavily overgrown with weeds. The profiled spade head with serrated teeth on either side allow soil, roots and debris in the ground to be cut quickly on both the push and pull stroke.



#### **CHORLEY WANDERERS SIGN UP CUB CADET**

Chorley Wanderers are celebrating an early season victory with the purchase of a new Cub Cadet lawn tractor.

The volunteer-run, FA Chartered football club currently has teams playing across Preston and the surrounding areas. Their pitches are seeing a lot of use, so the new machine is being put through its paces!

Dan McDermott from Chorley Wanderers found Preston based C&C Machinery dealership on Facebook, and invited them to the club. The machine they brought with them was the Cub Cadet LT2 NR92 36" lawn tractor. C&C provided a full demonstration, and Dan was so impressed with the quality of cut and collection that he invested in one there and then.

The LT2 NR92 benefits from hydrostatic drive, a powerful and reliable Cub Cadet engine, direct collect 3-in-1 option, making it versatile and reliable to use. Dan and the team also commented on how well-built, light and agile the machine was, not to mention the low running costs.

Dan was highly complimentary of both C&C machinery and of Cub Cadet commenting, "I would just like to take this chance to express our appreciation for your service on behalf of all of us at Chorley Wanderers. We've had the mower for a few months now, and from the start, you've helped us with anything we needed. The mower has been out guite a few

times already and kept the pitches neat and tidy. We are a relatively small club, but the Cub Cadet ride on mower has been a god-send to us and helps us maintain quality playing pitches for our young players."



Commenting on the addition of CEuk products, Tim Hart, Director of Sales & Marketing for Barrus said, "The CEuk range has proven extremely successful with professional users. These products offer our garden machinery dealers an additional revenue stream and access to a wide range of customers from arborists to allotmenteers, foresters to fencers, gardeners to metal detectorists."



### CUB CADET, CAMERA! ACTION!

Following great success last year and all the fantastic tweets and posts by Cub Cadet dealers, the Cub Cadet social media prize draw is back.

Between March and August dealers have a chance to win a GoPro HERO5 action camera! These cameras are small and compact yet deliver amazingly clear video and are easy to use with a single record button press. Ideal for filming Cub Cadet lawnmowers and tractors and showcasing the rigorous conditions they might face!

Emily King, Marketing Executive for Barrus, commented, "To be entered into the prize draw, dealers just need to tag Cub Cadet UK in their Facebook posts and @CubCadet\_UK in their tweets. We can then see the posts, like them and share the content with all our followers; promoting dealers as well as the Cub Cadet brand."

Each month, one lucky dealer will WIN a GoPro to help with future social media posts. The winner will be announced each month via email. "What we're hoping for is to be inundated with great content and videos like the one we made showcasing the XT with Tight Turn xTreme," concluded Emily.

To view it go to the Cub Cadet YouTube channel.



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The Discovery 58 is powered by a Yanmar 4LV150 common-rail engine.

### INNOVATIVE COMMON-RAIL ENGINE DEVELOPMENTS FROM YANMAR

#### New Yanmar 4LV Series

The new Yanmar 4LV series of common-rail (CR) engines now offers a range of 5 engines with outputs from 150 to 250hp which harness the very latest in electronically managed CR fuel injection technology for the mid-range of Yanmar clean and efficient diesels.

The 3500rpm units include the 150, 170 and 195 hp models and there are two higher output 230 and 250hp models at 3800rpm. Demonstrating the Yanmar 5x best-in-class features reflected throughout its new generation of marine diesel engines, the new 4LV range is clean, interconnective, quiet, powerful and fuel efficient. By exceeding the strict EPA Tier 3 and EU RCD Tier 2 emission regulations, the engines are virtually smoke and odour free in operation.

For direct connectivity, the 4LV range has been developed alongside Yanmar's industry-leading electronic control and monitoring systems and connects seamlessly with NMEA or J1939 networking. This ensures support of advancing marine technologies and allows future-proofed integration to any multifunction bridge display.

The engines incorporate the latest technology to enable very low vibration and noise levels for a smooth and quiet running engine. These include a chain rather than belt drive, a counterbalance shaft and refined component design.

Featuring a class-leading power-to-weight ratio, the 4LV delivers a powerful low-end torque performance due to the 2.8 L displacement. This results in a stunning acceleration and set these engines apart from others in their power range. The digital control systems constantly monitor the engine to maximise performance and minimise fuel consumption, ensuring these are among the most fuel-efficient engines on the market.

Extremely versatile, the 4LV is an ideal installation for sailboats, motor boats, or light commercial vessels. Robert Plant, General Manager for the Marine Diesel Division at Barrus commented, "These engines have been designed for an important segment of the boat propulsion market where there is intense competition from many players. Yanmar is now the only marine engine manufacturer to offer a full range of common-rail engines from 40hp right up to 440hp, all with low emissions, lively performance, superb fuel efficiency and renowned Yanmar reliability."

Smallest CR inboard marine diesel engine The compact Yanmar 3JH40 inboard engine is Yanmar's latest addition to its family of next generation common-rail (CR) diesel engines.

The 3JH40 has been recognised as one of the most groundbreaking new consumer marine products after receiving a prestigious 2018 Progressive Insurance Miami International Boat Show Innovation Award. A distinguished judges' committee highlighted how the latest addition to Yanmar's family of new generation CR diesel engines is 'bringing advanced technology and increased efficiency to smaller boats.'

The 3-cylinder 3JH40 has been developed by Yanmar as the marine industry's smallest CR inboard diesel engine. With an output of 40hp, it will enable a whole new category of smaller leisure boat owners and commercial vessel operators to benefit for the first time from the efficiency and performance advantages associated with the most recent electronically-managed CR fuel-injection technology.

Offering minimal fuel consumption and exceptionally low noise and emission levels, the new Yanmar 3JH40 propulsion engine surpasses EPA Tier 3 and EU RCD Tier 2 emission regulations for virtually smoke and odour-free operation.

The 4-stroke, water-cooled 3JH40 is an ideal solution for new builds and repowering applications, specifically monohull sailing yachts and catamarans up to 45ft, small motor boats or sloops, and light duty commercial craft.



YANMAR LAUNCHES THE DTORQUE TURBO DIESEL OUTBOARD

Yanmar Marine International (YMI) has launched the Dtorque 111 twin-cylinder 50hp diesel outboard engine following its agreement with German manufacturer Neander Shark for exclusive global distribution. As Yanmar's exclusive distributor in the UK, Barrus has added Dtorque 111 to its extensive product line-up.

The compact Dtorque 111 is designed to revolutionise the small workboat market where its expected lifespan is well over 10,000 hours. The Dtorque offers a remarkably smooth and quiet diesel engine, delivering 50hp at the propeller with a stunning torque output of 111 Nm at just 2,500 rpm. This is more than enough to quickly accelerate most small craft onto the plane with plenty of low-down lugging power for heavy displacement duty.

To create the Dtorque 111 the German developer and manufacturer Neander went back to basics and deconstructed conventional small diesel engineering. The result is a two-cylinder common-rail turbocharged diesel engine using a unique system of dual counter-rotating crankshafts in an aluminium block. This dramatically reduces the vibration levels that a conventional small two-cylinder diesel engine would normally generate. Combined with a patented 'Spaceball' design this not only achieves less vibration but also less noise, lighter boat handling and less stress on the engine.

The Dtorque 111 is the world's smallest diesel outboard engine with common-rail fuel injection. This enables it to deliver an impressive

performance with class-leading fuel economy and exhaust emissions that fall well within the latest EU RCD 2 limits. At full throttle and loading, it typically burns less than 12 litres of fuel per hour resulting in fewer refuelling stops and lower running costs.

For the past two years, both Yanmar and Neander have been trialling pre-series outboards in six EU pilot countries. A wide cross-section of customers around Europe were invited to test the performance of the outboards in differing sea states and loading conditions gathering as many opinions as possible.

Robert Plant, General Manager for the Marine Diesel Division at Barrus explains, "Yanmar's research has confirmed that this product is ideally placed for the light duty commercial market, from wind turbine servicing and fish farming to harbour and patrol duties, water taxis and superyacht charter services. We are confident that the combination of long range, low running costs, durability and low emissions delivered by this unique diesel outboard will appeal to operators across a wide range of applications."

The Dtorque 111 is currently being trialled in the UK by Robust Boats who design and build bespoke aluminium fishing and work boats. A twincylinder, single 50hp diesel outboard has been fitted to a Robust 19C aluminium work boat. With a virtually indestructible hull the 19C offers outstanding stability and ample deck space for carrying goods and passengers. The boat will be on show at Seawork International from 3-5th July in Mayflower Park, Southampton.



### MERCURY IMPROVES THE BOATING EXPERIENCE

Mercury Marine has introduced the new, ultra-light and reliable 15 and 20hp, EFI FourStroke outboards combined with an innovative new multi-function tiller handle assembly designed specifically for these models.

Ben Allen, General Manager of the Marine Leisure Division at Barrus, commented, "These new engines have been developed as a result of Mercury's extensive consumer research and define the features that customers have been asking for. An engine that is easy to start, intuitive to operate, lightweight, fuel efficient, quiet, powerful and reliable."

Designed for leisure use and commercial operators, Mercury's new outboards feature battery-free EFI for fast, reliable starting, instant throttle response and improved overall performance. They are among the lightest on the market improving acceleration, top speed and handling, and deliver exceptional fuel economy.

Like all Mercury FourStrokes, the new 15/20hp EFI's have been designed with ease of maintenance in mind. The clean, no drip, no spill oil drain system, fresh water flushing attachment, water separating fuel filter and the maintenance guide under the cowl make these some of the most user-friendly outboards available.

#### Multi-Function Tiller Handle is the first-of-its kind

The most significant new feature developed by Mercury for the new 15/20hp EFI FourStroke platform is the Multi-Function Tiller Handle.

Traditionally, tiller handles are mounted on the port side of outboard engines and are intended for left-hand operation. However, Mercury Marine's user research found that a significant percentage of boaters prefer to control the tiller handle with their right hand.

In tiller operated boats with fixed seating positions, the tiller handle can now be positioned in the most convenient location to operate the outboard. Using hand tools, boaters can adjust the tiller arm's horizontal angle 18 degrees port and starboard from the centre at 6-degree increments. The throttle grip rotation is also reversible to complement the tiller angle position to provide a more intuitive and comfortable boating experience, regardless of driving hand preference. Mercury's research also showed that boaters don't have the option to adjust a tiller's vertical operation. This is a feature that they would find useful due to boat layouts making tillers difficult to reach in some cases. In response, Mercury designed an adjustable down stop that allows boaters to quickly and easily change the vertical operating angle of their tiller handle between -5 and +10 degrees for easy reach and comfort. Mercury also designed a tilt lock feature that locks the tiller angle at 73 degrees positioning it out of the way.

"Mercury's new proprietary tiller handle is adjustable in ways that have not been possible before on portable outboards," commented Ben Allen, General Manager for the Marine Leisure Division at Barrus. "It offers users improved functionality and control for portable outboards enhancing the overall boating experience," Ben concluded.

#### MERCURY'S LATEST ADDITION TO THE PRO XS LINE-UP

Building on the successful launch of the Mercury 115 Pro XS in 2016 and setting a new standard in the 150hp high-output category, the new 150 Pro XS outboard lives up to the legendary Pro XS reputation for superior hole shot, top-end speed and durability.

Fishing enthusiasts and professionals alike have long considered Mercury's Pro XS outboards to be the most durable, reliable and best-performing outboard engines for competition fishing. This new four-stroke will continue that tradition, but it is also an ideal fit for performance-oriented fibreglass and aluminium boats.

Ben Allen, General Manager for the Marine Leisure Division at Barrus commented, "We believe that Barrus will have the same success with this new engine that we have experienced with the Mercury 115 Pro XS, of which demand is continuing to grow within both the leisure and racing sectors."





### MERCURY POWER IS THE RACERS CHOICE

Now firmly established on the racing calendar, the Hanseatic Water Ski Race will be returning to King's Lynn for its fourth year this summer. Ranked across Europe as the best venue and competition, the Hanseatic Race attracts skiers worldwide and the Barrus Marine Leisure Division are pleased to be sponsoring the 2018 event.

This year will see the return of Formula 1, 2 and 3 water-ski racing to the South Quay in August 2018 with racing on Saturday 18th and Sunday 19th. 6 races will be contested each day including an under 8's race which has become a favourite with the crowd after its original inclusion two years ago.

Over the course of the weekend, highly tuned powerboats reach speeds of over 100mph whilst demonstrating the skill of the boat crews enhanced by the courage and fitness of the skiers being pulled behind. Thousands of spectators flock to the quayside to witness such high-energy speed and endurance at close proximity. "With Mercury Racing engines being the choice for many competitors, it makes sense for us to be in attendance and support this exciting event commented Ben Allen, General Manager for the Marine Leisure Division at Barrus. "The Marine team had a fantastic time watching the event last year and are looking forward to returning for an even bigger event in August."

"This ski race just gets bigger and better and will continue to grow from strength to strength. I know this year will be the loudest and most exciting year to date celebrating its fourth anniversary and, most of all, an unforgettable experience," commented Jason Russell, Chairman of the Hanseatic Ski Race.

The Hanseatic Water Ski Race is free to attend. Full details of the schedule are published at www.kingslynnskirace.co.uk

#### MARINER AND MERCURY ENGINES USED TO TRAIN MARINE ENGINEERS OF THE FUTURE



Founded in 1787, Hull Trinity Academy is a well-established, all-boys comprehensive school in the heart of Hull. The Academy is unique in offering Maritime Studies, and this sits at the forefront of the Academy's development plans.

In September 2017, the Academy introduced a new, Post 16 Maritime Education course, Maritime Study, which Barrus has supported by providing outboard engines and specialist training.

The Marine Divisions have donated a Mercury 100hp EFI four-stroke outboard engine and three 25hp Mariner two-stroke outboard engines. In

addition, the Subject Leader of Maritime Studies, David Forth, attended a 2.5hp – 60hp outboard engine training course unique to Mariner and Mercury engines.

Currently, students use the donated engines to gain familiarity and learn the differences between two-stroke and four-stroke engines. As the course advances and higher levels are introduced, diagnostics and fault finding will also feature. The Academy has made links with local industries and prospective employers to align Maritime Study with their requirements and, to celebrate the launch of the new course, the Academy was opened by HRH Princess Anne. Tim Bennett, Technical Service Manager for the Marine Leisure Division, attended on behalf of Barrus to support the event.

"Looking ahead, we hope to become a centre for Maritime Education that can not only serve the local industry but also support some of the major shipping companies," commented David Forth.

"I have operated Mariner engines since the 1980's and always considered them bulletproof. My decision to contact Barrus for support was finalised when a coastguard engineer commented on what a good company Barrus is - which has proved to be correct," David concluded.



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### MAKE THE SAFE CHOICE WITH YANMAR

Barrus took the opportunity to focus on the upcoming EU Stage 5 regulations at the Executive Hire Show in February earlier this year reassuring customers that engine manufacturer Yanmar remains ahead in the emission game.

www.trommall.com

The new emission standards for non-road diesel engines come into force in 2019 and 2020 and will apply to machines used in construction, industrial and agricultural applications. The objective of the standards is to progressively reduce particulate and NOx emissions and to phase out equipment with the most polluting engines.

Yanmar customers with TNV-CR water-cooled series industrial engines are already prepared for the introduction of EU Stage 5 regulations in 2019. "The Yanmar engine range is the result of decades of experience, providing the perfect combination of clean emissions, excellent durability and low cost of ownership," commented John Day, General Manager of the Industrial Division at Barrus. "Yanmar Stage 5 engines have a compact profile and the same footprint as Stage 3A engines allowing for a smooth, trouble-free transition."

Yanmar engines are available as a powerpack, radiator and air cleaner mounted, including wiring harness and CAN panel. The clog-free Diesel Particulate Filter (DPF), even under light load conditions, can be mounted in multiple positions for greater flexibility where space is limited. "Another key benefit is Yanmar's unique exhaust gas management technology for the DPF, which has a lifecycle of between 6,000 – 10,000 hours and beyond depending on the application," John Day added. "This effectively means that the DPF is maintenance free for the lifetime of the machine."

Customers currently using Yanmar Tier 4, Stage 5 engines include TrommALL, who manufacture and distribute mobile screening equipment. They have recently gone 100-percent with Yanmar across their range of machines. "Using Yanmar has opened so many doors for us," commented Ger Smullen, Business Development Manager for TrommALL. "Everyone knows Yanmar, the service is known worldwide."

Protech has also fitted the Yanmar 4TNV88C Tier 4, Stage 5 engine into a Tracked Post Driver. "We chose the Yanmar engine for its smooth and quiet operation, fuel economy, and that it was available fully built up as a powerpack," commented Steve Craddock, Director, Protech Machinery Ltd.

Flowplant, the specialists in high-pressure fluid engineering are one of the most recent customers to specify the Yanmar 4TNV98C, Tier 4, Stage 5 engines for their high-pressure water pumps.



skid units providing high-pressure water for a unique and innovative cleaning system for deployment to any of the major airline repair centres around the world.

The Harben Century pumps provide a finely controlled water volume at high pressure to a specially designed cleaning probe. The probe delivers a precise jet with laser-like accuracy onto a metal alloy surface where the water selectively removes microscopic particles but leaves the surface properties intact.

The Harben pumps are powered by the Yanmar EU Stage 5 engines and the skid incorporates on board power generation and a water collection recycling system, allowing the pumps to operate for extended periods with only 1000 litres of fresh water.



Flowplant engineers have produced two bespoke Harben self-contained



# QUIETLY LIGHTING THE WAY

Powered by the popular Yanmar L70 diesel engine, Stephill Generator's latest SLT5000 Mini Lighting Tower is a bright new addition to its line-up.

With 4 x 200 Watt LED lamps mounted on a 5.4 metre mast, the powerful new mini-lighting tower provides over 3200 square metres of single direction illumination, over 2500 square metres of 360- degree lighting at 20 lux average and a 'white light' similar to that of daylight.

A compact package of power, the Yanmar L70 engine range has been designed with Yanmar's proprietary direct injection technology which, coupled with super-precise fuel injection equipment, results in an environmentally friendly engine with low fuel consumption and running costs. Richard Beechey, Sales Manager, Stephill Generators commented, "We chose the Yanmar L70 engine due to its remarkable record of reliability, durability and "benchmark" status within the plant and hire industry."

The new unit is fitted with forklift pockets and central lifting eye and, with excellent 4 wheel manoeuvrability, can be easily loaded and off-loaded via a vehicle tail lift. The adjustable stabiliser legs and hand operated winch ensure rapid and simple deployment. The SLT5000 has a 4.5kVA, 230/115v dual voltage output when operated as a generator and features a Deep Sea DSE3110 control module. An optional programmable timer is available so that the generator can be set to start and stop on a daily basis when lighting is required. With a sound level of just 66dBA @ 7m and run time of 52 hours when operated as a lighting tower, the SLT5000 also includes a lockable control panel door, low oil pressure and high engine temperature shutdown, low fuel level warning and self-bleeding fuel system amongst other features.

### KAWASAKI'S GROWING NETWORK



There has been a substantial rise in the volume of Kawasaki engines being fitted to groundscare and turf care equipment in the UK. Kawasaki's range of high-performance two and four-stroke petrol engines are widely used to power walk-behind lawnmowers, ride-on mowers and other garden machinery.

As the UK distributor for Kawasaki industrial engines, the majority of Sales & Service Dealers appointed by Barrus are predominantly engine biased with some cross-over into the garden machinery sector.

Using only Kawasaki Engine genuine parts is essential to maintain the original performance standards of an engine and to maximise the life of the

machine the engine is powering. Just as important is ensuring that there is an extensive network of Service Dealers to offer Kawasaki customers the optimum level of service locally.

"To provide customers with greater choice and access to Kawasaki genuine parts we are extending our existing Kawasaki Sales and Service Dealer network to incorporate our specialist garden machinery dealers," commented Tim Hart, Director of Sales & Marketing at Barrus. "This will significantly boost the coverage to around 350 outlets," Tim concluded.

"More and more customers are specifying Kawasaki engines to power their products every year, so it's important that our reach to end-users expands," commented Andy Pringle, Product Manager for Kawasaki Engines. "Top quality products need top quality service, and we look forward to continuing to support Barrus in building their network, while maintaining the high service levels they already achieve through their existing dealers."





### LATEST JOHN DEERE FINAL TIER 4 ENGINE TECHNOLOGY FOR COMBILIFT

Combilift handed its 30,000th unit sold – the first C14,000 multidirectional forklift to be powered by a John Deere Final Tier 4/Stage IV engine - to steel production giant Haslinger Stahlbau at CeMAT 2017.

Established in 1998, Combilift has grown to become the acknowledged global leader in the long-load handling market. The Combilift concept combines a forklift and a sideloader, together in one manoeuvrable, multidirectional and cost-effective machine.

Haslinger's new C14,000 will work alongside a range of Combilift equipment at the company's European sites. Boasting a lifting capacity of 14,000 kilograms (30,000 pounds) and a sturdy construction, the C14,000 was built to handle long and heavy loads such as steel, concrete, prefab timber frames, or machine components. The versatile unit can perform all the warehouse material handling tasks of a counterbalance forklift, an aisle truck, and a side loader, inside the warehouse and outside in the yard.

The C14,000 delivered to Haslinger was the first to be fitted with a 4.5L Final Tier 4/Stage IV engine, instead of the previous Tier 3/Stage III A model. "We use John Deere engines in all our larger-capacity diesel-powered models, but this was our first trial with the new technology," commented Martin McVicar, Managing Director of Combilift. "Barrus was a great help," Martin continued. They suggested a 4.5L engine and identified the most suitable cooling radiator. The very essence of the multi-directional concept is to

enhance warehouse efficiency, so we were keen to keep machine design as small as possible. Barrus also advised us to position the SCR (selective catalytic reduction) unit away from the engine so we could fit the entire package in a tighter envelope."

With over 30, C14,000 units sold to companies worldwide in 2017, including OEM's such as Liebherr Group and John Deere, Combilift's order book includes another 12, all with 4.5L engines.



The high ground clearance of the C14,000 is ideally suited for both indoor and outdoor use.



### JOHN DEERE DELIVERS THE POWER FOR COMPACT CRUSHING IN LONDON

Air pollution is one of the most significant challenges facing London and with the tightening of emission standards and the introduction of Ultra-Low Emission Zones (ULEZ) this poses challenges for the construction and demolition industry.

The Ultra-Low Emission Zone regulations apply to all non-road mobile machinery so equipment used on construction and demolition sites will need to meet the required emission control and noise levels.

Red Knight 6 Ltd, an innovative business supplying equipment to the quarrying and recycling market, has worked with a demolition company in the London Borough of Camden to source a crushing machine that meets all the criteria for their Clean Air Action Plan.

In addition to the machine meeting the requirements of reduced noise, dust and emissions, there was a further challenge of accessibility to the construction site in Haverstock Hill Road. With so many surrounding buildings close by the crusher needed to be highly mobile to work within the limited space. It also needed to produce final aggregate in one pass so that it could be re-used immediately on site.

RED Knight 6, recommended a RUBBLE MASTER 70GO! 2.0 tracked mobile impact crusher powered by a John Deere Tier 3/Stage III engine. Paul Donnelly, Director of Red Knight 6 commented, "With its noise-reducing design the RM 70GO! is the perfect solution for noise-sensitive areas like inner cities. There are many design elements within the machine that make RUBBLE MASTER the most silent impact crushers in the industry, such as noise-reducing engine compartment, engine mounting and optimised ventilation slots."

This compact, yet powerful crusher with an average throughput of 125 tons per hour handled 4000 tons of material on site, and the job was finished within five days. "The performance and reliability of the John Deere engines kept the RM 70GO! operating at optimum capacity

during the project and the benefits of the fuel-efficient engine maintained very low fuel consumption resulting in reduced running costs," Paul Donnelly concluded.

Red Knight 6 has 25 John Deere powered machines operating in the south of England. As John Deere's exclusive distributor in the UK, Barrus provides service and spare parts support to Red Knight 6.



### BARRUS TO DISTRIBUTE WD-40 THE NO.1 PROBLEM SOLVER

Barrus has added WD-40, one of the best-known brands of multi-use penetrating oil spray and lubricants to its portfolio.

The familiar signature blue and yellow cans are instantly recognisable, but the range also includes a full line of professional grade speciality products formulated to perform specific, more demanding tasks. Barrus has selected the WD-40 Specialist<sup>®</sup> Lawn and Garden products to distribute through their authorised garden centres.

WD-40 Specialist<sup>®</sup> Lawn and Garden is designed to maintain and protect gardening tools and equipment all year round. This prolongs the life of gardening appliances and ensures the best performance from tools and

equipment. There are four products in the range including a Heavy Duty Grease, General Use Lubricant, Water Protective Silicone and a Foaming Cleaner. The WD-40<sup>®</sup> Multi-Use Product with a Smart Straw fixed delivery system is also available. This Original formula still helps solve maintenance problems for DIY, trade and industrial users alike.

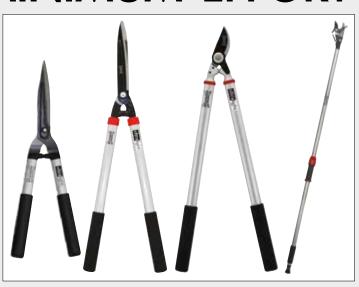
"WD-40 is a perfect complement to our existing market-leading gardening brands and provides our distribution network with an additional revenue stream," commented Tim Hart, Director of Sales and Marketing at Barrus. "WD-40 is a brand that people know and trust and one that guarantees quality and reliability."

### PRUNING WITH MINIMUM EFFORT

The Wilkinson Sword Ultralight collection delivers strong, expertly crafted and stylish garden tools in a comfortable, ultralight package that weighs almost half the weight of its traditional counterparts.

New to the range for 2018 are the Ultralight Shaping Shears weighing in at just 470gm. With a 150mm long, precision ground blade, the smooth and efficient action delivers a clean and precise cut. The compact 450mm overall length ensures greater control when shaping and trimming, aided by the lightweight aluminium handles with non-slip grips.

This award-winning range also includes the Ultralight Hedge Shears, Ultralight Bypass Loppers and the Ultralight Branch & Shrub Cutter. Since their launch, the Ultralight collection has been a real hit with gardeners looking for tools that enable them to achieve clean cuts with the minimum of effort. They have been popular with everyone from professional gardeners who spend all day cutting and pruning, to more mature gardeners who have found that their regular tools have become too cumbersome to manage.



### SHIRE GIVES NAVAL TRAINING BOATS A NEW LEASE OF LIFE

C BEA

Small boats used to teach Royal Navy Officer Cadets basic seamanship skills on the River Dart have been given a new lease of life with a Shire engine upgrade.

The new Shire 30YM WB engines have been chosen to power a fleet of 12 boats that are in operation at the Britannia Royal Naval College (BRNC), Dartmouth. The reliable Yanmar 3YM engines have been modified by Barrus to include hydraulic gearboxes, long lasting seawater pumps and additional features to make servicing quicker and easier. The 30YMs replace the previous Yanmar 3GM engines which have given exceptionally good service for over 15 years.

service with the Royal Navy over several decades and could be seen on the davits of most warships deployed as a ships tender, general sea boat, and lifeboat. The Whaler is no longer in service and the only boats remaining in the Navy are the ones used for training by the Naval College.

Phil James, Senior R&D Engineer at Barrus commented, "We have received favourable reports back on the performance of the new engines. They are smoother and quieter than the old engines and the College is looking forward to many more years of reliable service."

The whalers are a common sight on the river and are regularly used by the Cadets during their 30-week initial training course.

The boats, known as Motor Whaler's are 27ft open boats that were in

### MASE GENERATES THE POWER FOR AUTOGLASS® BODYREPAIR FLEET

Barrus has traditionally supplied Mase generators into the marine sector, but a new opportunity presented itself to provide the mobile power for the fleet of Autoglass<sup>®</sup> BodyRepair vans.

From its headquarters in Northampton, Autoglass® BodyRepair, part of the Belron Group, provides a national service across the UK repairing cosmetic damage to vehicles through a fleet of 150 mobile bodyshops. The majority of the vans are fitted with Mase Voyager 5010DM units plus a small number of 4010DM models, which are powered by Yanmar L100 diesel engines. The unit's soundproof casing features painted steel panels which are highly resistant to external forces and allow for easy access for maintenance.

"The decision to go with the Mase units was based on past experiences of gen sets and factors such as size, output, weight, and ruggedness made them compatible to our operation," commented Melvin Rolling, Head of Belron® Facilities UK. "The generators have proved to be very reliable, and an added benefit is that we can service them in-house."

All Autoglass<sup>®</sup> BodyRepair vans are equipped with a clever mobile repair rig that features an extraction and filter system which minimises the environmental impact of the gases released during the painting and drying process. Tooling on board consists of grinders, sanders, polishers, hot air guns, an air compressor and various pieces of equipment for repairing dents, all of which are powered by the Mase generator.

"Repairs can be carried out at the home or workplace, assuming it is safe and legal to do so and there is enough space to set up the mobile repair rig," commented Matt Mardell, Technical & Training Manager for Autoglass<sup>®</sup> BodyRepair. "Our aim is to be able to complete a repair for a customer independently, without the need to use their electricity."





### 'SCOTIA' EXCEEDS EXPECTATIONS

Powered by twin John Deere 6068SFM85 engines, Associated British Ports Ltd has taken delivery of a new 12.75m Pilot Vessel, 'Scotia'.

Ordered as a design build contract, Macduff Shipyards won the competitive tender to build Scotia and contracted Macduff Ship Design, currently celebrating its 25th anniversary, to produce the vessel design and steel kit to the owner's strict requirements.

Scotia has been designed to be the primary vessel for the Port of Ayr where she will undertake the dual purpose role of delivering full pilot duties and assisting the berthing of larger vessels in poor weather conditions. for general harbour duties whilst maintaining strict weight management. At 12.75 metres length overall 4.5 metres beam and design draught of 1.2 metres, the vessel is designed to carry two crew and two pilots and operate between the ports of Ayr and Troon and the Scottish West Coast. The vessel is classed to MCA workboat code regulations and surveyed by SCMS.

Supplied by the Special Products Division, the twin John Deere 6068SFM85 engines are rated 321hp at 2600 RPM and coupled with a ZF 305-3A gearbox with 2.423:1 ratio. During sea trials, the vessel performed admirably, exceeding all expectations. The trials gave an improvement on predicted speed, reaching 12.5 knots and bollard pull, achieving 5.2 metric tons.

With these varying requirements, the vessel needed to be suitably robust

#### NEW JOHN DEERE 4.5L ENGINE IS SMALLER, LIGHTER AND FASTER

The new John Deere PowerTechTM 4045SFM85 was showcased on the Barrus stand at this year's London Boat show, joining the existing line-up of John Deere Marine Tier 3 propulsion engines.

The new 4.5L engine offers high power to weight ratio for repowering and new boats and is ideal for planing and semi-displacement hulls. There are two ratings for light-duty commercial vessels, high-speed governmental applications and high-speed pleasure craft, which includes an M4 rating with 205kW (275hp) at 2600rpm and M5 rating with 235kW (315hp) at 2800rpm.

The engine uses a waste-gated turbocharger that provides greater torque capability at low and middle rpm range, which is most notable during vessel acceleration. Replaceable cylinder liners make it possible to rebuild the engine for extended service life.

Additional features of the 4045SFM85 engine include the standard front fuel service, optional left-hand or right-hand oil filter options for twin-engine applications and an upgraded valve train. The engine delivers a 40% increase in power and a 9% reduction in total engine weight for a 53% increase in power density compared to the 4045AFM85. The low-profile heat exchanger reduces overall height by 1.7" (4.3cm) from the 4045AFM85. Its water-cooled exhaust manifold creates a cooler and quieter environment for both passengers and crew. The PowerTech 4.5L engine ratings will meet U.S. Environmental Protection Agency Marine Tier 3 and Recreational Craft Directive II emissions regulations, as well as International Maritime Organisation Tier II standards for commercial and recreational applications. The engine is pending approval by American Bureau of Shipping, DNV GL, Lloyd's Register and Bureau Veritas and will be the only ABS-certified, 315hp, 4-cylinder inboard diesel engine.



# THE CHARGE AND A CONTROL OF A C

Barrus prides itself on having highly trained staff which is extended through to its network of dealers. Authorised marine dealers are supported by the Marine divisions with specialist training courses run by two of the Technical Service Managers, Tim Bennett and Jonathan Hay.

The Marine team deliver a series of annual training courses starting with the Dealer Recertification Course (DRC) in January. The DRC is a one-day course that provides the dealer network with information on the latest products and technologies, manufacturer information and solutions to technical issues. In addition to the DRC, training is offered for apprentices and new starters at authorised dealerships to familiarise themselves with the Mercury and Mariner outboard product line up, and the Mercury Diesel and MerCruiser inboard engine ranges.

An apprentice that recently completed a specialised Mercury Diesel and MerCruiser training programme is Karen Ogden, one of only a few female marine engineers in Wales. Karen began her engineering education at college and, after completing a Level 1 course in Car Mechanics, was given the opportunity to specialise in marine.

The Marine industry has placed focus on encouraging more female engineers into the industry, and AJK Motor & Marine Engineers, based in North Wales were approached by the Institute of Mechanical Engineering to offer an apprenticeship opportunity for Karen. After completing a two-day trial at AJK Motor & Marine Engineers, Karen has worked at the Mercury Diesel and MerCruiser authorised dealership, now trading as North Wales Marine Engineering, for 11 months. From the start, Paul Worthington, Owner of North Wales Marine Engineering, recognised Karen's ability to listen and understand quickly commenting that "Karen has the enthusiasm and drive to get up and do things. She is a quick learner and isn't afraid to ask when she isn't sure."

Over a three week period, Karen and Paul attended four training courses at the Barrus Training School in Bicester; Diagnostic Tools, DTS & SmartCraft Systems, Mercury Diesel Training and MerCruiser & EC Product Training. Paul commented, "The Barrus courses are very good because they are small groups and Jonathan is good at focusing on those that are struggling at each stage to give further explanation." Karen found using a new diagnostics system and learning how to save the data on the Diagnostic Tools course particularly useful.

Since the dealership changed hands, North Wales Marine Engineering has moved to Conway Marina and been approached to become the marina's sole marine engineer, so the dealership is looking forward to expansion.

Looking ahead, Karen will specialise in outboards, and Paul is confident that Karen can independently service an outboard to a high standard, commenting, "Karen is good at explaining to customers what the problems are with their engines and what has gone wrong."

Karen will be completing a Level 1 and Level 2 Powerboat Handling course this spring so that she can take customers' boats out and, after being asked what she would like to see more of in future, Karen replied, "More girls on the courses and smaller overalls!"



### BARRUS MARINE DIVISIONS CELEBRATE AWARDS OF EXCELLENCE

#### Business of the Year

The 2018 British Marine Trades Association Awards dinner crowned a highly successful first day at the London Boat Show 2018 for many and provided a welcome opportunity to focus on the achievements of leading personalities and companies in the industry.

Held on Wednesday 10th January, the highlight of the evening was the host of awards up for grabs. British Marine group associations, British Marine Trades Association and British Marine Leisure Boating had a combined five awards on offer, with industry publication, Boating Business, issuing another five on the night.

Barrus is delighted to have won the accolade of the British Marine Trades association 2018 Business of the Year, and members of the Marine Sales Teams were present at the event to accept their award.

Speaking immediately after the event, British Marine Trades Association Chairman, Paul Martin, stated, "It was great to recognise Barrus as our Business of the Year – both in light of the company's noteworthy 100th anniversary and its excellent level of service to retail and trade."

"This award has been won not only by our excellent Marine Sales Teams but also by our internal teams who support our marine businesses. A fantastic recognition and a wonderful start to the new year," commented Robert Muir, Managing Director for Barrus.

#### Marine Supplier of the Year

Celebrating 2017 powerboat racing success, the annual RYA Powerboat Racing Awards were held on Saturday 3rd February where racers from offshore, circuit and jet bike were joined by friends, family, sponsors and supporters.



From left to right: Lee Allen and Mike Williams representing Barrus Marine Divisions.

A highlight on the powerboat racing calendar, the awards provide the perfect opportunity to get everyone together from across all the disciplines to celebrate the sports successes, and over 50 awards were presented throughout the evening.

Barrus has a long association with offshore racing enabling the company to showcase the power and performance of its engine brands under the most extreme conditions.

Barrus is delighted to have been awarded the RYA Industry Award for Marine Supplier of the Year and two members of the Marine Division, Lee Allen and Mike Williams, attended the ceremony to accept the award.

"It was a great surprise and honour to have been awarded Marine Supplier of the Year. As we look ahead to the 2018 season we will be announcing some new racing partnerships to complete our portfolio," commented Lee.

Supported by Barrus, SUNUS Ocean Racing (SOR) use marine motorsport as a platform to raise awareness of Stillbirth and, through this partnership, the team have achieved more honours with twin Mercury Verado 400R engines than any other team in the world.

SOR reinforced the Verados' record-breaking pedigree at the RYA Powerboat Racing Awards ceremony and added the following records to the list of successes:

- RYA Marathon C Class British Champion
- RYA British Records Rib Open 114.86mph
- Outboard Immersed Propeller Monohull 113.01mph
- Club Racing Unlimited 110.52mph
- K7 Gold Star for breaking a record over 100mph.

The world record holding Blastoff Racing Team, also supported by Barrus, came away with two awards:

- Bronze medal for RYA Marathon C Class Championship
- Blastoff Racing's Team Manager, Shelley Jory-Leigh was named RYA
  Powerboat Racing Ambassador

"2017 was a strong year for the Barrus Marine Divisions and the powerboat racing teams that the company supports. These awards are very well deserved, and it is great to see the teams' successes being recognised and celebrated. We're all looking forward to another successful race season in 2018!" commented Ben Allen, General Manager for the Marine Leisure Division at Barrus.

### BARRUS TAKES DELIVERY OF NEW TRANSPORT FLEET



Ideally situated at the heart of the country's motorway system, Barrus is able to provide an excellent distribution service to customers throughout the UK and Ireland with a transport fleet operated and driven by the company's own professional team.

In addition to completing approximately 18 deliveries per day, the Transport Team support all Barrus divisions by transferring goods from the warehouse to the main site and workshops, as well as building up and breaking down over 30 shows around the country each year.

Recently, Barrus has taken delivery of 3 new tractor units, DAF XF 430 FT MX13 4X2 Super Space Cabs, supplied and prepared by HTC DAF in Oxford. This upgrade allows the Transport Team to enter emission controlled zones that will be launched around the UK in 2019 as the multi-torque 6 cylinder diesel engines, Paccar MX-13 12.9L, meet the latest Euro 6 emission control standards. The new fleet provides an improvement in fuel efficiency of up to 7% due to the higher torque at lower revs of the Paccar engines in addition to improvements in the driveline, axles, enhanced electronics and aerodynamics. Complete with market-leading telematics, the fleet management system gives a real-time insight into driver and vehicle efficiency providing clear information on vehicle location, fuel consumption, mileage, utilisation, idle time and green band driving.

"The outstanding driver comfort makes the cabs an even more attractive and comfortable place to work and sleep," commented Rob Malone, Transport Manager for Barrus. "The drivers are keen to get to grips with their new vehicles and are looking forward to providing excellent customer service over the next few years," Rob concluded.

### BARRUS MODEL NEW BICESTER TOWN WAR MEMORIAL

Barrus has a long association with the Bicester & District Branch of the Royal British Legion, and when the Research and Development Department was asked to get involved in a local community project, they were only too pleased to help.

In partnership with the Bicester Town Council, Branch members Brian Bailey and David Crabbe are campaigning to replace the current Bicester War Memorial and replace it with a new one which is more centrally located. The preferred location for the new Memorial is Bicester's Market Square which currently has plans in place for refurbishment.

To help bring the plans and designs for the new Memorial to life, and to aid the fundraising campaign, the Branch asked Barrus if they would produce a 3D model rendition. A 12" model was produced on Barrus's 3D printer which



is used to print prototype and production parts in different plastics and colours. Oxford Brookes student, Phoebe Carter-Powell, who was working with the R&D team on a one-year engineering placement was involved in the drawings and production of the model. David Crabbe, Member of the Bicester & District Branch of the Royal British Legion, commented, "The Branch Chairman and members of the Branch would like to express their profound gratitude to Barrus and especially the staff directly involved in producing the 3D model of the proposed new War Memorial. There is no doubt that the model will be a most valuable tool in accurately demonstrating our design and desires as we move forward with the planning application and fundraising process."



From left to right: Phil James, Senior R&D Engineer, Barrus, Brian Bailey, The Royal British Legion, Phoebe Carter-Powell, Barrus, Brian Leach, The Royal British Legion, David Crabbe, The Royal British Legion

### AWARD-WINNING PRIMARY SCHOOL SCOOP WILKINSON SWORD'S COVETED PRIZE

Wilkinson Sword's Gardening for Schools competition which was launched last year was won by Stanford in the Vales CE Primary School's Gardening Club.

For the children at the Oxfordshire Primary School this win rounded off a summer filled with Gold Awards from RHS Wisley and nominations for 'RHS Gardening Team of the Year 2017'. The competition challenged primary schoolchildren to design their ideal fruit and vegetable garden for their school with the prize of an extensive hamper full of all the tools needed to keep their garden growing.

Diana Thomas, proud mum explained how both her children attend the club every week, as well as attending to their own allotment. "I am extremely proud that all of their hard work is paying off," she commented, adding that they love growing their own fruit and vegetables, and using the new tools.

SCHOOLS

The Wilkinson Sword Marketing Team presented the prizes, along with Lucas Hatch, RHS Young Gardener of the Year 2012, who also provided a fig growing masterclass!

lan Seager, Marketing Manager for Wilkinson Sword commented, "We are passionate about getting children more involved in the garden, and are proud to play a part in this inspirational gardening club's ongoing horticultural education. The success of this first competition has inspired us to look at rolling it out to the rest of the country in the future. We hope that this will encourage more children to get motivated about getting their hands dirty and growing home grown food!"

### LONCIN ENGINE ENDURES EXTREME CONDITIONS

In early February, 14 teams from the UK travelled to Finland to compete in the toughest international lawnmower endurance race.

Racing against teams from 5 different countries, Loncin powered race team Jurassic Coast rode across Lake Karhijärvi in Lavia at speeds of over 30mph in a purpose-built lawnmower. With temperatures ranging between -4°C to -10°C and fading light towards the end, the 12-hour race proved to be a challenge.

Jurassic Coast is made up of three members, Stuart Middleton, Team Mechanic and Chief Builder, Paul Tindall, Team Manager and Sam Smith, Team Mechanic. For the past eight years, the team has been involved in lawnmower racing, and Sam's background in supporting his parent's garden machinery business has developed his knowledge of lawnmower engines to build a competitive machine.

Specifically built for endurance racing, the lawnmower features a live axle to drive like a go-kart, a steering rack to ease the strain on the arms and tyres fitted with studs to grip on the frozen lake. However, without suspension, the race was harsh on the drivers' bodies! A Loncin G390F-EP was chosen to power the lawnmower based on the engine's reliability, ideal rev range and

affordability, and the team commented that Loncin engines are becoming more popular in the sport for these reasons.

Jurassic Coast was placed 16th out of 42 entries, and the team enjoyed their first race of the endurance series. "The team had an amazing result considering they have never competed in this race before." commented Dawn Penn, Owner of Penn Lawn Mowers. "I can't tell you how proud my husband and I are of them all as they not only represent our lawnmower racing group, Mower Madness but also our company, Penn Lawn Mowers. The Loncin engine proved extremely durable and performed very well in such cold conditions," Dawn concluded.





# BARRUS PARTNERS THE ROSE

Up until November last year, the very first Shire engine to be supplied by Barrus was still powering the Rose of Hungerford, a purpose-built, 55' wide-beamed pleasure boat belonging to the Kennet & Avon Canal Trust (KACT) – a full 20 years after its installation!

After two decades of exceptionally hard work, however, it was decided that the time had come for an upgrade. This would not only allow the Rose to continue to operate reliably for another 20+ years but would also provide an opportunity for several other modifications that could simplify the maintenance programme for the willing volunteers who care for both the engine and boat.

"The engine has led a tough life being driven by numerous helms on our heavy programme of public and charter trips," commented Mike Rodd, Chairman of the Hungerford Branch of the KACT. "A new engine seemed to be the most appropriate way ahead. Barrus proved to be a very sympathetic

partner, not only offering the new engine at a most reasonable price but also supplying a host of other components free of charge. They also generously provided their extensive engineering expertise at no cost to the Trust!" Mike concluded.

After careful examination of the running conditions, a 50hp Shire engine was selected and modified by



Barrus to fit the Rose's engine bay. The new engine was installed, and the boat was successfully commissioned – just in time for the first of the many annual Santa trips!

The Rose undertakes over 200 public trips each year, including both scheduled cruises and charters, and carries over 6000 passengers a year. Operated and maintained by volunteers, she brings in an income to the Trust of approximately £40,000 per annum. To find out more about the Rose of Hungerford and the Kennet & Avon Canal Trust, visit **www.rose.katrust.org.uk**.





In addition to holding stock, the Barrus Upper Heyford warehouse is home to Barrus boot camp, an internally run exercise class instructed by James Tonks, After Sales Support Technician for the Marine Leisure Division.

An Engineer by day, James is an REP's certified Level 3 Personal Trainer and Les Mills Body Balance Instructor. The boot camp sessions are a blend of HIIT, and functional metabolic resistance training to target fat burn and lean muscle growth. "I believe exercise should be exciting, challenging and, above all, fun to be effective. I try to bring this attitude to all of our classes," commented James.

Fondly known by members as 'Barrus Bootycamp', the classes started in spring 2016 when the Barrus Transport Team asked for advice on training. James offered ideas and delivered the first class which by demand became weekly and then twice weekly as members grew. Rob Malone, Transport Manager, was one of the Barrus boot camp founders. "After the first couple of weeks, we were using muscle groups that hadn't been used in years and as the workouts increased; our fitness levels did, too," commented Rob. Rob continued, "James has an exceptional ability to motivate all fitness levels and age groups and, as an older member of the team, I find this very rewarding. Everybody that attends is made to feel welcome, and it is a great way to get to know your work colleagues outside of the work environment."

There are now over 20 Barrus staff from across the divisions attending regularly. All age ranges and levels of ability are welcome, and James tailors exercises accordingly to support each member in achieving their personal goals.

Sales Engineer, Sam Pearson, has noticed impressive results since joining Barrus boot camp and commented, "After doing very little exercise for a few years, James finally convinced me that boot camp would be a good idea and since then, I've not looked back! I've lost over a stone in weight and feel much better for it."

James concluded, "I get so much enjoyment from these classes. The effort level and teamwork in sessions are incredible, and the results reflect it."

### LUCAS WINS BARRUS CUP IN TESTING CONDITIONS

Congratulations to our work experience student, Lucas Shrimpton, who has recently been awarded the Barrus Cup!

Held at Great Moor Lake near Calvert in Buckinghamshire in August last year, the Barrus Trophy Races had 5 crews competing in 5 different races throughout the day.

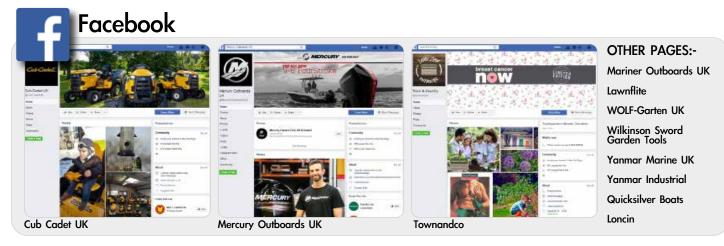
The two-man team of Ian Richards, Helm, and Lucas Shrimpton, Crew, achieved first place in a Wayfarer sailing boat and Lucas commented that the races were made even more challenging by very light winds.

For decades, Barrus has used Great Moor Lake as its venue for boat trials and, in 1993, provided Great Moor Sailing Club with the Barrus cup to give something back.

# KEEP IN TOUCH! 🖪 💟 🛅 🞯

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Francesca Toman, PR & Social Media Co-ordinator looks after our online presence creating a buzz across the company and our brands. Share your news with Francesca - francesca.toman@barrus.co.uk







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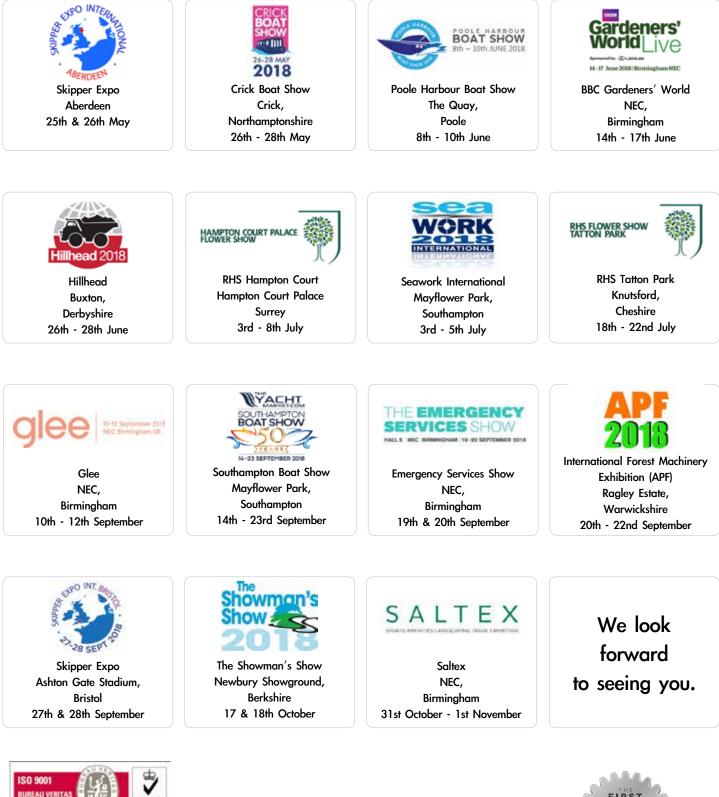
#### Instagram





# **Barrus Show Planner 2018**

Come and see us at the many shows and exhibitions we attend throughout the year. Check out the Events Calendar at www.barrus.co.uk plus Facebook and Twitter for the latest information on forthcoming events.





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Should you require further information on any of the items featured in this issue of The Innovator, please contact Karen Clarke.

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CELEBRATING OUR FIRST 100 YEARS, GEARING UP FOR THE NEXT.